AMENDMENTS TO THE CLAIM

1. (currently amended) A method for time aligning first and second signals, comprising:

modulating said second signal by said first signal to provide a third signal; and

determining frequency ~~components~~ component strengths of said third signal, said frequency ~~components~~ component strengths being indicative of time alignment between said first signal and said second signal ~~signals~~ , wherein said step of determining frequency component strengths of said third signal comprises;

filtering said third signal to provide a filtered signal while sweeping said second signal through a time delay; and

detecting a level of said filtered signal, said level being indicative of time alignment between said first signal and said second signal, said step of detecting a level of said filtered signal comprises:

first detecting when said filtered signal is at a minimum level during said sweeping, said minimum level occurring at a first time delay value;

second detecting when said filtered signal is next at said minimum level during said sweeping, said next minimum level occurring at a second time delay value; and

setting a time delay value for said second signal at a delay value between said first time delay value and said second time delay value;

wherein said first signal comprises a data signal encoded in a predetermined bit pattern in a Non-Return-to-Zero signal format, said second signal comprises a Return-to-Zero pulse signal having a frequency equal to a data interval of said first signal, and said third signal comprises a data signal in which said data is encoded in a Return-to Zero signal format .

2. - 4. (cancel)

5. (currently amended) The method according to Claim [[4]] 1, wherein said step of detecting a level of said filtered signal further comprises:

converting said filtered signal to a DC voltage signal; and

measuring a voltage level of said DC voltage signal.

6. (cancel)

7. (currently amended) The method according to Claim [[6]] 1, wherein said first and second detecting steps comprise converting said filtered signal to a DC voltage signal, and detecting the voltage level of said DC voltage signal during said sweeping.

8. (original) The method according to Claim 1, wherein said first signal and said second signal are in correct time alignment when a fundamental frequency of said third signal equals one-half the frequency of said second signal.

9. (currently amended) The method according to Claim [[4]] 1, wherein said step of filtering further comprises filtering said third signal with a low pass filter.

10. (original) The method according to Claim 1, wherein said first and second signals comprise optical signals.

11.-20. (cancel)

21. (new) An apparatus for time aligning a first signal and a second signal, said first signal being a Non-Return-to-Zero data test signal and said second signal being a Return-to-Zero pulse signal, said apparatus comprising:

a modulator for modulating said second signal with said first signal to provide a third signal;

a filter for filtering said third signal to provide a filtered signal, said filter filters said third signal while sweeping said second signal through a time delay range; and

a detector for detecting a fundamental frequency of said third signal, said detector detecting when said filtered signal is at a minimum level at a first delay value, said detector further detecting when said filtered signal is next at said minimum level at a second delay value, said detector further providing a delay value for said second signal being at a time delay value between said first time delay value and said second time delay value.